

Conference Poster Abstract

Collecting physiological stress measures in research among high-risk parents for child maltreatment: A qualitative investigation

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Background: Studies on evidence-based, behavioral training programs have shown a positive reduction in self-reported stress among parents at high risk of child maltreatment (CM). However, no known studies on these programs have examined physiological biomarkers for stress, such as impaired levels of cortisol and dehydroepiandrosterone (DHEA), and telomere length. Further, no details are known regarding the feasibility of collecting biological markers from parents. This research examined qualitative findings from a multidisciplinary neurobiology and public health study that examined physiological responses to a six-week, evidence-based, behavioral parenting program, among a maternal population at risk of CM perpetration in Atlanta, Georgia.

Methods: Eighteen high-risk mothers were assessed at pre-intervention and post-intervention for parental stress and behavior (i.e., self-report, observational), and non-invasive physiological markers for cortisol, DHEA, and telomere length. Hormones were measured using two salivary methods, passive drool and Salivette swabs, as well as hair samples. Telomere length was assessed using cheek swabs. Semi-structured interviews were conducted at baseline to examine the feasibility of collecting biological samples for parental stress research among a sub-sample of participants (n=13).

Results: Early qualitative themes suggest interest in providing hair and cheek swab samples. Notable suggestions were made to improve saliva collection. Particularly, participants showed clear preference for swabbing methods over passive drool collection.

Conclusions: These study findings add novel results to the parenting literature on parental stress and provide emerging evidence on parental willingness to engage in physiological research. Acceptance of collection methods encourages further examination of biomarker correlates using non-invasive and inexpensive methods in biobehavioral research.

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